
Proposals to Amend the High School Graduation Rule

This information brief describes Minnesota's existing high school graduation rule and the state Board of Education's proposals to amend the rule -- first by adopting outcome-based graduation standards and, currently, by adopting results-oriented graduation standards. It also lists some practical questions about implementing graduation outcomes state-wide.

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As a result of a 1992 law, the legislature has until July 1, 1994, to decide whether to accept, reject, or modify the state Board of Education's proposed graduation standards. If the legislature does not pass a law by July 1, 1994, governing the state's high school graduation standards, or the board's ability to adopt those standards, the board is empowered to take final action to adopt its proposed graduation rule. If adopted, the amended rule will have the force and effect of law.

Under the amended rule, the state Board of Education proposes to make Minnesota among the first states in the nation to require public high school graduates to demonstrate their ability to achieve graduation outcomes rather than complete a required number of courses and credits. The board's proposed amendments are in response to criticism that too many Minnesota students are graduating from high school without the skills necessary to enter the work force or pursue a post-secondary education. According to Tom Lindquist, past president of the state Board of Education, the purpose of the proposed rule is "to create a new framework which is results-oriented and based on the belief that all students can learn . . . [and] to prepare our graduates to meet the new challenges of the Information Age, the 21st Century, and international competition."

The board's initial draft of the proposed rule generated controversy among some lawmakers and educators who questioned:

- whether a system based on outcomes¹ would produce meaningful educational benefits
- whether the educational benefits would be commensurate with the cost of implementing the system
- whether the short timeline² proposed for implementing the new rule was realistic

The 1992 Legislature responded to the controversy by passing a law³ that precludes the board from taking final action to adopt an amended high school graduation rule until July 1, 1994.⁴ The purpose of the law is to give the legislature a finite amount of time to consider the desirability of adopting the proposed rule.⁵

The Existing Graduation Rule Prescribes a General Curriculum

Under current state Board of Education rules parts 3500.2000 to 3500.3100,⁶ Minnesota's high school students must complete a total of nine credits of specific requirements in core academic areas: four credits of English, one credit of math, one credit of science, and three credits of social studies. Students must also complete credit offerings in elective areas. Students must complete a total of 20 credits during grades 9 through 12 in order to graduate.⁷

A high school credit is defined as a Carnegie unit, which is equal to five classes per week for one entire school year. A requirement of 20 total credits occupies a five period school day for all four years of high school. There can be variations in the length of the school year or class period, and how a student's time is spent while in school. The 20 credits students must complete

represent the state's minimum requirements for graduation. School districts may elect to impose additional credit requirements for graduation.

The current state high school graduation requirements are general, prescribing "mathematics" curriculum instead of "algebra;" and "science" curriculum instead of "biology." Consequently, curriculum requirements can vary by school district and school building. Courses with the same label may have different curriculum content, despite the influence of curriculum guides and standardized subject matter tests. In addition, curriculum requirements may be satisfied with various levels of the same course, including remedial, basic, general, and academic levels.

Some school districts have curriculum requirements that exceed the state's minimum requirements and other districts have very few local requirements. Disparities in revenue among school districts may be one reason for the extensive variation in districts' curriculum requirements; students' interests may be another. Districts and schools with sufficient financial resources and college bound students may offer coursework that exceeds the state's minimum curriculum requirements, either because of the students' own academic goals or because of college entrance requirements.⁸ Districts and schools with insufficient financial resources and non-college bound students may offer coursework that barely meets the state's minimum curriculum requirements and is very limited in scope.

The State Board of Education First Proposed Outcome-Based Standards

In May 1991, the state Board of Education gave preliminary approval to replace current high school graduation requirements with an "outcome-based education" (OBE)⁹ approach. The outcomes approach contained in the initial draft of the board's proposed graduation rule is an extension of several education theories developed since the 1950's: behavioral objectives, learning outcomes, criterion-referenced measurement, mastery learning, and competency-based education. OBE programs are based on a philosophy that all students can learn if school programs are organized and operated properly.

The OBE approach would have required students to attain seven graduation outcomes¹⁰ and 63 competencies¹¹ at one of three performance levels in order to graduate: adept, advanced or exemplary. The board revised its proposal after educators and others criticized the OBE approach for:

- interfering with the ability of school district officials to establish local curriculum requirements
- requiring three alternative performance levels that might discriminate against some students and result in student tracking
- requiring a personalized learning plan for each student that would have been too costly and time consuming to prepare¹²
- requiring school districts without sufficient funds or staff resources to develop their own tests to determine whether students were meeting the graduation requirements

- being too closely associated with outcome-based education as a method of instruction
- proposing a short, unrealistic timeline for implementing the proposed rule
- forcing colleges and universities to place greater reliance on standardized national tests as part of their admissions procedures because of the difficulty of measuring and interpreting outcomes

The State Board of Education Currently Proposes Results-Oriented Standards

In 1992, the board published a second draft of the graduation rule in which it proposed to define graduation outcomes in terms of "results-oriented education." Unlike the OBE approach, this second draft of the rule separates graduation outcomes into content outcomes and exit outcomes. Students' performance of the graduation outcomes would be measured against a single state standard. School districts would have "total latitude" in deciding how to implement state graduation requirements at the local level. The board expects the state to help local educators design the assessment processes to measure students' achievement of the graduation outcomes.

Like the OBE approach, the second draft of the proposed rule rejects curriculum requirements defined by the length of time students are in class. Instead, the proposed rule requires students to demonstrate their ability to master broadly defined requirements, or graduation "outcomes." The graduation outcomes¹³ describe essential concepts, principles, and processes that students must know in order to understand new information and complex situations. The proposed rule defines two categories of graduation outcomes:

content outcomes¹⁴ that describe essential reading, writing, and math processes as well as elective content outcomes; and

exit outcomes¹⁵ that describe generic abilities that students must possess in order to make knowledge useful.

Students at all grade levels would be required to master the five interdisciplinary "exit outcomes," or general skills: thinking constructively, setting and achieving realistic goals through self-directed learning, communicating effectively, working collaboratively, and contributing to the community. The board has not yet selected the specific content outcomes. In spring of 1993, a citizens' group working with educators will identify the content outcomes in reading, writing and math that students must achieve. Students' performance of the exit and content outcomes¹⁶ would meet either a "state" or "exemplary" performance standard.¹⁷ the "state" standard¹⁸ describes the performance level that all students who wish to graduate would meet; the "exemplary" standard¹⁹ describes a level of performance that exceeds the "state" standard.

The State Must Develop Performance Standards and Assessment Tools

Before the proposed rule can be effectively implemented, the state Department of Education must develop performance standards for all graduation outcomes and valid assessment tools to measure students' performance. Between 1993 and 1997, the board anticipates that teachers and students at a number of pilot sites will develop and validate the performance standards and assessment tools.²⁰ Assuming the success of the pilot sites, the board would begin distributing performance standards and assessment tools²¹ to the state's school districts in 1995. By July of 1997, school districts would be required to submit a plan to implement the new graduation rule to the education commissioner for approval. Students in kindergarten through grade 9 would be subject to the new graduation rule beginning in the 1997-1998 school year; students in grades 10 through 12 in the 1997-1998 school year would remain subject to the old rule. The board solicited the public's comments on the proposed rule at eight meetings throughout the state during November and December of 1992.

Practical Questions about Implementing Graduation Outcomes

What distinguishes the philosophy underlying the board's proposed rule from other education theories is its focus on outcomes. Some educators, as well as the board, are advocating the use of outcomes as a means to address public concerns for school improvement, fiscal and educational accountability, and school autonomy. They believe that outcomes represent an effective joining of control at the state level, where outcomes are set, with autonomy at the local level, where schools can achieve outcomes in any number of ways. A number of practical questions can be asked about how to successfully develop and implement results-oriented graduation outcomes.

- what specific curriculum outcomes, from exit outcomes to students' lesson outcomes, must the state and the school districts develop
- what effect will graduation outcomes have on students with special needs, gifted and talented students, and students of color
- what are the logistics of providing enrichment and remediation to students
- what are the mechanics of monitoring student progress
- how much research into assessing outcomes is required before appropriate measures of student performance will be widely available in the classroom
- what kinds of staff development training are required
- how does an administrator move a school district from a "traditional" education system to a system based on graduation outcomes
- what financial resources are required to implement graduation outcomes state-wide

Summary

The state Board of Education believes that too many students are graduating from high school without necessary skills. Consequently, the board is proposing to replace existing high school graduation requirements based on numbers of courses and credits with results-oriented graduation standards. Legislators and educators dispute the benefits and costs of the board's proposed standards. Before the proposed rule is completed, the board must develop content outcomes, performance standards, and assessment tools to measure students' performance. The legislature has until July 1, 1994, to pass a law governing state high school graduation standards. If the legislature does not act by that date, the board may adopt its proposed rule.

Appendix A

Comparison of Current and Proposed State High School Graduation Requirements

Current Credit Requirements	Initial Proposal: Outcome-Based Graduation Standards	Current Proposal: Results-Oriented Graduation Standards
Content		
<p>Students in grades 9 to 12 are required to complete at least the following to graduate:</p> <ul style="list-style-type: none"> 4 credits of English 3 credits of social studies 1 credit of math 1 credit of science <u>11</u> elective credits 20 <p>The 20 credits represent the state's <u>minimum</u> requirements for graduation. Many school districts impose additional requirements for graduation.</p>	<p>Students would have been required to attain seven graduation outcomes and 63 competencies to graduate.</p> <p>The proposal included:</p> <ul style="list-style-type: none"> ● three performance levels -- adept, advanced, and exemplary; ● a personal learning plan and a graduation plan for each student; and ● performance-based assessment procedures developed at the local level and approved by the education department. 	<p>Students would be required to demonstrate their ability to master broadly defined graduation outcomes at a state or exemplary performance level to graduate.</p> <p>Graduation outcomes include:</p> <ul style="list-style-type: none"> ● specific content outcomes in reading, writing, and math and elective outcomes; and ● five exit outcomes or general skills. <p>Before the proposed rule is implemented, the state must develop performance standards and valid assessment tools to measure students' performance.</p>
Critics' Assessment		
<ul style="list-style-type: none"> ● The state graduation requirements are too few in number and overly general, leaving districts with too much discretion in determining curriculum offerings. ● Students' level of mastery of particular subjects can vary widely. ● Graduation requirements defined in terms of courses and credits based on time preclude schools from focusing on educational goals or preparing students to function in society. 	<ul style="list-style-type: none"> ● Required three alternative performance levels that might have discriminated against some students and resulted in student tracking. ● Required a personalized learning plan for each student that would have been too costly and time consuming to prepare. ● Required school districts without sufficient funds or staff resources to develop their own tests to determine whether students were meeting the graduation requirements. ● Was too closely associated with outcome-based education as a method of instruction. ● Proposed a short, unrealistic timeline for implementing the rule. ● Would have forced colleges and universities to place greater reliance on standardized tests as part of their admissions procedures because of the difficulty of measuring and interpreting outcomes. 	<p>Still largely unreported, although some issues critics raised regarding the OBE proposal may apply. The board solicited the public's comments on the proposed rule at eight meetings throughout the state during November and December of 1992.</p> <p>Assessment is difficult because the board has not yet:</p> <ul style="list-style-type: none"> ● identified specific content outcomes in reading, writing, and math; ● developed performance standards; or ● developed valid assessment tools to measure students' performance.

Endnotes

1. Outcomes are defined as the end products of the instructional process that are evidenced by observable or internal changes in the student. Under this definition, an education system based on outcomes shifts the focus of curriculum development from objectives based on curriculum content or textbook outlines to objectives based on desired changes in the student.
2. The state Board of Education initially proposed a process by which final adoption of outcome-based graduation standards would occur in the fall of 1992. School districts would have submitted to the education commissioner by June 30, 1995, and no later than July 1, 1996, a comprehensive plan to verify students' achievement of the graduation outcomes. Currently, the board is proposing a process by which final adoption of results-oriented graduation standards, including reading, writing and mathematical processes standards, would occur in August of 1994. The board would adopt the remaining graduation standards in June of 1995. School districts would submit to the commissioner by July 1, 1996, and no later than July 1, 1997, a comprehensive plan to verify students' achievement of the graduation outcomes.
3. Minnesota Laws 1992, chapter 499, article 8, sections 32 and 33.
4. Included among the powers and duties of the state Board of Education is the statutory authority to adopt and amend rules. M.S. §121.11, subdivision 12, contains the board's general rule making authority. The 1992 law (see endnote 5) precluding the board from adopting an amended high school graduation rule until July 1, 1994, supersedes the board's general rule making authority.
5. The law requires the board to prepare for the legislature a progress report by February 1, 1993, and a final report by January 1, 1994, that describe board proceedings to adopt the amended rule.
6. See Appendix A on page 6 for a comparison of current and proposed state high school graduation requirements.
7. For a comparison of state high school and college preparation requirements, see **State High School and College Preparation Requirements Compared**, House Research information brief, September 1991.
8. For example, students entering the University of Minnesota are required to have completed at least the following as high school preparation: four years of English, three years of mathematics, three years of science, two years of a foreign language, and two years of social studies. The University recommends that students also take courses in visual and performing arts and computer skills.
9. The instructional tools and school organization that educators adopt to implement an OBE program depend upon what outcomes the educators wish to achieve. In an OBE program, curriculum is organized into segments containing outcomes that are defined in terms of goals and objectives. Educational services and materials must be designed to enable students to realize the goals and objectives.
10. The graduation outcomes required the graduate to demonstrate the knowledge, skills, and attitudes essential to:
 - communicating with words, numbers, visuals, symbols, and sounds;
 - thinking and solving problems to meet personal, social, and academic needs;
 - contributing as a citizen in local, state, national, and global communities;
 - understanding diversity and the interdependence of people;
 - working cooperatively in groups and independently;
 - developing physical and emotional well-being; and

- contributing to the economic well-being of society.
11. Each graduation outcome contained between six and 16 competencies. For example, included under the outcome requiring the graduate to contribute as a citizen in local, state, national, and global communities were the following nine competencies:
 - (1) articulate interdependence within ecosystems;
 - (2) explain the actions required for responsible stewardship of the environment;
 - (3) explain the trade offs implicit in the resolution of science-technology-society issues;
 - (4) articulate the interdependence among selected social systems;
 - (5) describe the structure, functions and processes of the United States' system of government at all levels;
 - (6) compare and contrast the United States' political and economic systems with those of other countries;
 - (7) describe the processes to access and influence governmental policies at the local, state, national, and global levels;
 - (8) participate in community service;
 - (9) relate a variety of cultural, political, scientific, technological, and historical perspectives to current events.
 12. Under the proposed rule, school districts would have the option of developing personalized learning plans for their students.
 13. Under the proposed rule, graduation outcomes are described as "the knowledge and processes essential to lead productive and fulfilling lives in a complex and changing society and to continue learning. The two categories of outcomes are exit and content."
 14. Under the proposed rule, content outcomes are described as "the knowledge and processes that give the graduate an in-depth understanding of various contexts. Elective content outcomes represent particular areas of interest or specific knowledge and processes needed for post secondary endeavors. Graduates must demonstrate the content outcomes listed in the graduation rule."
 15. Under the proposed rule, exit outcomes are described as integrating "the knowledge and processes from previous learnings in a life context."
 16. The second draft of the proposed rule does not include the performance standards for the graduation outcomes nor most of the content outcomes.
 17. Under the proposed rule, performance standards are defined as "qualitative descriptions of the knowledge and processes identified by the state Board of Education for the exit outcomes, and content outcomes."
 18. Under the proposed rule, the state standard is defined as "the lowest performance acceptable for graduation. Over time, the standard will be adjusted by the state to reflect research and society's expectations."
 19. Under the proposed rule, the exemplary performance standard describes "the optimum performance for graduation. Over time, the exemplary expectation will be adjusted by the state to reflect outstanding learner performances."
 20. The state Board of Education plan calls for educators at the pilot sites to spend 1993 to 1995 developing performance standards and assessment tools and 1995 to 1997 validating the assessment tools and refining related procedures.

21. Under the proposed rule, the state would develop and use several testing models in a limited number of districts before requiring all districts to adopt tests to measure student performance.